

A Preliminary Study on Integration of Ideological and Political into Course Data Mining

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Abstract: Ideological and political curriculum is the new requirement of the new era for colleges and universities to carry out the work of establishing morality and cultivating people, which is also the national and party's major plan. Relying on the concept of Outcome based Education, explore the establishment of teaching system integrating ideological, political and professional courses in colleges and universities. Take "Three Holds Education" as the way to realize the ideological and political education of the curriculum. Through the construction of objectives, content, mode and evaluation of teaching the construction of ideological and political teaching system under the theory of Outcome based Education can be achieved. It can lay a solid foundation for the ideological and political teaching and construction of the curriculum.

Keywords: Curriculum Ideological and Political, Outcome based Education, Curriculum Design, Teaching System

1. Introduction

In the new era, in order to answer the fundamental questions of who, how and for whom to cultivate people, we need to explore better ways to improve the mechanism of establishing morality and cultivating people. In December 2016, General Secretary Jinping Xi emphasized at the national ideological and political work conference of colleges and universities that "we should adhere to the central link of moral cultivation, run ideological and political work through the whole process of education and teaching, achieve the goal of educating people in the whole process and in all directions, and strive to create a new situation for the development of China's higher education" [1]. In June 2020, the Ministry of Education issued the Guidelines for Ideological and Political Construction of Courses in Colleges and Universities. The document points out that to build a high-level talent training system, it is necessary to integrate the ideological and political work system into it and do a good job in the curriculum ideological and political construction. At the same time, we need to solve the "two skins" problem of professional education and ideological and political education [2]. As an advanced educational concept, the essence of OBE (Outcome based Education) is to optimize the curriculum and teaching through the reverse design of the target results, and form feedback adjustment to achieve the goal of the expected results [3]. In the process of designing the teaching system of ideological and political education, we need to find the entry point and corresponding ideological and political elements according to the graduation requirements. Then, the teaching method corresponding to the previous link can be realized. Finally, feedback from the teaching evaluation link to the teaching goal link can adjust the achievement oriented goal of the integration of ideological and political education and professional teaching timely.

This paper studies and explores how to integrate curriculum ideological and political education with advanced educational concepts. Through the use of themes and cases that can cultivate students' ideals and beliefs, value orientation, and social responsibility. The ideological and political elements are "moistening things silently" integrated into the curriculum teaching to achieve the combination of value guidance and knowledge teaching [4]. A diversified evaluation system has been developed, which focusing on process assessment to ensure the teaching effect of ideological and political education [5]. We propose a curriculum design framework based on multi-mode integration, and prove its effectiveness through the practice of a core course "Data Mining".

2. Course Design Based on OBE Ideological and Political

According to the basic task requirements of establishing morality and cultivating people and the education concept of OBE and "student-centered", this paper establishes a teaching system that integrates curriculum content with ideological and political education, as shown in Figure 1. Starting from the objectives of teaching and relying on the content of teaching, this paper explores the teaching mode and method of integrating ideological and political elements. Through the organic combination of ideological and political elements and the whole course teaching process, students are guided to learn professional knowledge based on national conditions. Finally, we strive to achieve teaching results from the three aspects of knowledge, ability and values.

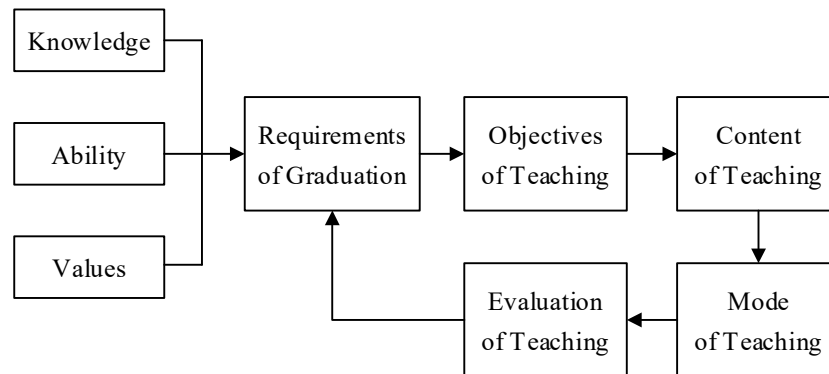


Figure 1: Ideological and political teaching system based on OBE

2.1. Objectives of Teaching

In recent years, the ideological and political construction of curriculum has become the focus and difficulty of curriculum construction in colleges and universities. In particular, the construction of ideological and political courses for science and engineering majors. Most science and engineering teachers focus on imparting professional knowledge, and pay less attention to students' ideological and political education. As an engineering course, "data mining" mainly focuses on the following two aspects to explore and achieve the teaching objectives of integrating politics, ideology and graduation requirements with curriculum [6].

(1) Take educating people as the core, and inject ideological and political genes into every link of the course actively. Explore the mixed mode and method of teaching that covering the whole course. While imparting professional knowledge, it plays a role in cultivating students' world outlook, outlook on life and values.

(2) Based on the background of "New Engineering", combined with the current situation and development of relevant fields at home and abroad. Combining theory with practice can improve students' ability to solve practical engineering problems in the field of data mining. Cultivate students' interest in scientific research, family and country feelings and global vision. Train students to be new engineers with both ability and character.

2.2. Content of Teaching

Mining the thoughts, philosophies and spirits contained in professional knowledge, and enriching the teaching content of data mining. Starting from the "fit point" of ideological and political content and professional knowledge and design teaching cases carefully. Instead of copying mechanically, the ideological and political elements "moisten things silently" into the process of knowledge teaching. Transform classroom teaching oriented to knowledge and skills into multi-dimensional classroom teaching integrated with ideological and political education [7].

(1) Mastery and accumulation of knowledge. On the premise of covering the course outline, the knowledge system of data mining and ideological and political elements contained in each knowledge point will be deeply explored. Grasp the internal logic between knowledge teaching and value guidance

accurately and activate ideological and political education links. Students learn professional knowledge and lay a solid foundation of values through cases, stories and practice.

(2) Cultivation and promotion of ability. "Data Mining" was set up in the third year of undergraduate, and students have entered the stage of professional courses. Expand the curriculum from simple professional knowledge learning to professional education based on ideological and political education, and improve students' professional quality and ability. At the same time, it will provide students with rich ability reserves for their subsequent study and life.

(3) Establish correct values. In the course of ideological and political practice, guide students to learn professional technology based on national conditions. The students' personal development is linked with the development of the nation closely, and the correct values are established. Explore the value, spirit and ideas contained in professional knowledge. By integrating ideological and political elements into the whole teaching process, the dialectical unity of ideological and political curriculum and professional curriculum construction is achieved.

2.3. Mode of Teaching

Innovative teaching mode is one of the ways to broaden the ideological and political teaching methods of the curriculum. In the ideological and political construction of the curriculum, ideological and political education is embodied in the content of the curriculum to achieve the mutual integration of ideological and political education and the curriculum. The development of ideological and political curriculum is based on teaching, and the effect of implementation depends on teachers' methods largely. We design teaching cases by sections before, during and after class, and integrate ideological and political elements into the teaching content organically. And make full use of cloud classes, Mooc, offline resources, etc. to implement online and offline hybrid teaching mode [8], which is shown in Figure 2.

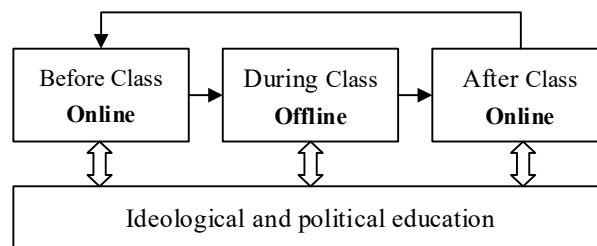


Figure 2: Online and offline hybrid teaching mode

2.4. Evaluation of Teaching

The real effect of ideological and political education is reflected in students' life, study, scientific research and other aspects. The diversified evaluation system can improve the teaching effect of ideological and political courses, and promote students to improve their personal comprehensive quality from multiple perspectives. Take the professional teaching content as the carrier to establish a diversified evaluation system. Focus on process assessment to ensure the teaching effect of ideological and political education. The ideological and political elements will be included in the course assessment, and a supporting assessment system will be established. The specific implementation measures and means are as follows.

(1) Strictly implement the attendance system and cultivate students' punctual and serious learning attitude.

(2) Make use of cloud class for teacher-student interaction, check the teaching effect at any time, and cultivate the style of focus and devotion of students.

(3) In the usual homework assessment, students are required not to plagiarize, and students are required to be honest and trustworthy.

(4) In the big homework and some experiments after class, students are encouraged to work in groups to develop their ability of cooperation, communication and thinking.

In a word, it is necessary to combine the process assessment results with the final assessment results

during the construction of the assessment system. Then we can make objective and accurate evaluation results for students. And promote the growth and development of students through teaching evaluation.

3. Conclusions

Talent cultivation is the fundamental task of colleges and universities. The student-centered concept of OBE coincides with the concept of "Three Holds and Education" carried out by colleges and universities. This paper explores the establishment of an integrated system of ideological and political education and professional teaching in application-oriented colleges and universities by taking the ideological and political education of the "three integrity education" course as a way to achieve.

By analyzing the characteristics and graduation requirements of the data mining course, the teaching objectives of the course are established. By mining the ideological and political elements contained in the curriculum, the course teaching content is constructed by taking specific events and people as cases. The method of simultaneous design of curriculum content and ideological and political content is adopted to construct model of teaching that integrates curriculum with ideological and political content. The method of combining process evaluation and achievement evaluation is adopted to construct a diversified evaluation system. Adopt the method of combining process evaluation and achievement evaluation to build a diversified evaluation system. The research results of this paper can provide a new idea and system reference for relevant colleges and universities to carry out curriculum ideological and political education.

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